Effect of family history on outcome in German patients treated with radical prostatectomy for clinically localised prostate cancer.

Abstract: The outcome of prostate cancer (CaP) patients treated with radical prostatectomy (RP) might be influenced by family history (FH) in a subset of patients. We analysed the effect of sporadic, familial and hereditary CaP stratified by risk on clinico-pathologic characteristics and biochemical recurrence-free survival (bRFS) following RP. Data of 8041 German patients treated with RP between 1994 and 2008 in Germany were analysed. We evaluated the impact of FH stratified by D'Amico's risk classification on pathologic characteristics using Cochran-Mantel-Haenszel tests. The impact of FH stratified by risk on bRFS was analysed in a proportional hazards regression. Five thousand seven hundred and fifty-six (71.6%) had sporadic, 1779 (22.1%) familial and 506 (6.3%) hereditary CaP. Adjusted for risk group, FH was associated with age of onset<65 years (p<0.001) but not with pathological characteristics or bRFS. The subgroup of patients with high risk and hereditary CaP numerically had the lowest bRFS rate at 5 (52.9%) and 10 (30.7%) years. However, this observation was statistically insignificant (p = 0.267). Familial and hereditary CaP patients were 1-2 years younger than sporadic cases at CaP diagnosis. Sporadic, familial and hereditary CaP have the same pathologic characteristics and bRFS rate following RP. Patients with a positive family history are diagnosed
earlier than sporadic patients. Stratification in subgroups by risk group did not add further information.